

ABSTRACT OF THE DISCLOSURE

A method of manufacturing an electro line for a semiconductor device includes depositing a molybdenum (Mo) layer on a substrate, depositing a copper layer (Cu) on the Mo layer, forming a photoresist pattern on the Cu layer, etching the Cu layer and the Mo layer using an etchant to form a Mo/Cu electro line, wherein the photoresist pattern is used as a patterning mask, and removing Mo residue around the Mo/Cu line to reduce short circuits between electro-lines and leakage current in the thin-film transistor.